Work Order December-19-12 1			/		*94!	584*						Page 1
Revision ID:	3137-5 asher				Accept	*N900	040	100)* s	etup Start Stop	*N: *N!	S1*
	/19/12 11/13		Qty: 20.00 Qty: 20.00	*20* *20*		Cust Item I Customer:	D:			,	1 4	. 12
Approvals: P	rocess l	Plan:	pl	Date: /3-0/-2	Z. Tooling:	Da	ate:	-	R	tun Start Stop	1/1	R1*
Q	C:			Date:	SPC (Y/N):	Da	ate:				*N	R2*
Sequence ID/ Work Center ID		Opera Descri			Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty		Reject Number	Insp. Stamp
Draw Nbr	F	Revision N	br								· · · · · · · · · · · · · · · · · · ·	
D3137	R	lev F										
*100 *100* Hardinge Hardinge CNC Lathe St	mall	Harding	ge CNC LATHE S Memo 1-Machine a 2-Identify as 3-Deburr	s per Folio FA471 and [0.00 0.00 Dwg D3137	Ŋ	13-01-	Z7	20	Ø		
110		QC2- It	nspect parts off m	achine FAI/FAIB	0.00				0.0	~/		
110 QC Quality Control			Memo		0.00	SJ1.	3-01-2	Z	2.0	Ø		
120		QC8- II	nspect parts - seco	and check	0.00		2		0.	d		\ 04 ••••
120 QC Quality Control			Memo		0.00	(\$ -	(- 2	2	20	4		<u> </u>

NCR:	Yes	/ No				WORK ORDER NON-C	COL	NFORM	JANCE / UPD	ATE				
											QA Closed:	Dat	e:	
Work Ord	er.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		
Part						Rework Scrap Use-as-is		r	Skid-tube Machining	Crosstube Small Fab Finishing		Water Jet d. Eng. Coor. re/Packaging	= E	ngineering Quality Other
NCR	No		5.			Work Order Update]		Large Fab	Composite		Supplier		
Root					Descri	ption of work order update		Initial	Actio	on	Sign &			•
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Descrip	otion	Date	Verification	١	QC Inspector
Doc/Data														
Equip/Tooling													1	
Operator			i											
Material	Ш												- 1	
Setup	Ш													
Other	Ш													
Process	Ш											:		
Supplier	Ш		ŀ											
Training	Ш													
Unapproved							<u> </u>				,			
						<u> </u>	AUL	T CATE	GCIRY					
Landi	ng G	ear				General		-		<u> </u>				
		Bending				Bend		Grain			Ovalized		Pre	essure/Forced
	Ц	Centre No	t Concer	ntric to (o/s	BOM/Route	L	Hardwa	re		Over/Under	tolerance	Te	mperature/Cure
	\square	Cracks				Broken/Damaged	L	Inspecti	on Incomplete		Part Incorre	ct	w	eld
	Щ	Crushed/0	Crimped,		L	Burrs	L	Instruct	ions Incomplete/Un	nclear	Part Lost/Mi	issing	\w _i	rong Stock Pulled
	Щ°	Cuffs				Contamination		Mainte	nance		Part Moved			
	╚	leat Trea	t			Countersink		Mislabe	led		Positioned V	V rong		
	\bigsqcup	nspection	n Strip in	Tube		Cut Too Short		Misread	1		Power Loss/	'Surge	Ot	her
	╚	Ripples in	Bend			Drill Holes		Offset						
	I 1	orque W	aves in E	xtrusio	n [Drawing		Out of C	Calibration					

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

160

Identify as per dwg & Stock Location 3367 0.00

160

Packaging

Memo

0.00

Packaging

gor -

13-01-23

										DQA.	Date.	
NCR: Y	'es /	No				WORK ORDER NON-C	ONFOR	MANCE / UP	DATE	QA Closed:	Date:	
Work Orde	er:					DISPOSITION		,	AGAINST DE	PARTMENT	/PROCESS	•
Part N						Rework Scrap Use-as-is Work Order Update		Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	ł	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Descri	ption of work order update	Initial	Ac	tion	Sign &		
Cause	[Date	Step	Qty	(or Non-conformance	Chief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling												:
Operator												
Material												,
Setup		l										

DO 4 .

FAULT CATEGORY Landing Gear General Bending Bend Grain Ovalized Pressure/Forced Centre Not Concentric to O/S BOM/Route Hardware Over/Under tolerance Temperature/Cure Broken/Damaged Inspection Incomplete Cracks Weld Part Incorrect Crushed/Crimped. Instructions Incomplete/Unclear Part Lost/Missing Wrong Stock Pulled Burrs Cuffs Contamination Maintenance Part Moved Heat Treat Countersink Mislabeled Positioned Wrong Inspection Strip in Tube Misread Power Loss/Surge Other Cut Too Short Ripples in Bend Drill Holes Offset Torque Waves in Extrusion Drawing Out of Calibration Turning Sequence Finish Out of Sequence Wave/Twist in Tube Folio Outside Dimensions

Other
Process
Supplier
Training
Unapproved

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

94584

Page 3

December-19-12	2 12:57:16	PM		94.	104		. 					
Item ID: Revision ID:	D3137-5	-		Accept	*N900	040	100)*	Setup	Start	I VI	S1*
Item Name:	Washer									Stop	*N	S2*
Start Date:	12/19/12	Start Qty: 20.00	*20*		Cust Item I	D:						
Required Date:	: 1/11/13	Req'd Qty: 20.00	*20*		Customer:							
Reference:												
Approvals:	Process P	Plan:	Date:	Tooling:	Da	ate:	.		Run	Start	*N	R1*
	QC:		Date:	_ SPC (Y/N):	Da	ate:				Stop	*N	R2*
Sequence ID/ Work Center I	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accep Qty	t Re Qt	ject y	Reject Number	Insp. Stamp
170		QC21- Final Inspection -	Work Order Release	0.00						1	-1	1 /
170 QC Quality Control		Memo		0.00					100		<u>7) []</u>	/25° W

											DQA:	Date:	
NCR:	Yes	/ No				WORK ORDER NON-	COI	NFORM	MANCE / UP	PDATE			
											QA Closed:	Date:	
Work Ord	er:					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Part NCR	No.				***************************************	Rework Scrap Use-as-is Work Order Update		Therm	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root			1	·	Descri	ption of work order update		Initial		ction	Sign &		
Cause		Date	Step	Qty		or Non-conformance		ief Eng		cription	Date	Verification	QC Inspector
Doc/Data	Г												
Equip/Tooling				1									
Operator	Г												
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Training													ļ
Unapproved													
						F	AUL	T CATE	GC)RY				
Land	ing (Gear				General		-			_	·	-
	L	Bending				Bend	L	Grain			Ovalized		Pressure/Forced
	L	Centre No	ot Conce	ntric to	o/s	BOM/Route	L	Hardwa	re		Over/Under	tolerance	Temperature/Cure
		Cracks				Broken/Damaged	L	Inspecti	on Incomplete		Part Incorre	ct	Weld
		Crushed/	Crimped.			Burrs		Instruct	ions Incomplete	/Unclear	Part Lost/M	issing	Wrong Stock Pulled
		Cuffs				Contamination		Mainte	nance		Part Moved		
		Heat Trea	at			Countersink		Mislabe	led		Positioned \	N rong	_
		Inspectio	n Strip in	Tube		Cut Too Short		Misread	i		Power Loss,	'Surge	Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Folio

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Picklist Print

December-19-12 12:57:15 PM

Work Order ID:

94584

Parent Item:

D3137-5

Parent Item Name:

Washer

Start Date: 12/19/12

Required Date: 1/11/13

Page 1

Start Qty: 20.00

Required Qty: 20.00

Comments:

IPP A04.11.04New issueKJ/JLM

IPP Rev B 08.07.03 ECN1207 EC verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6R0.750 6061-T6 Round Bar .750"		Purchased	No			100	f	118.1380	0.0208	33 ^{0.437894}	So	13-01-	22
				Location		Loc Qty	Lo	c Code					
				MAT012		13				·····			
				1207	734	13							
				MAT013		105.138							
				1212	282	9.024							
				1220	081	26.494						,	
				1237	757 ` .	21.62			_ & 8	3 3			-
				1240)29	48							

												DQA:	Dat	te:	
NCR:	Yes	/ No					WORK ORDER NON-	COI	NFORM	//ANCE / UPI	DATE	·		_	
												QA Closed:	Dat	te:	
Nork Ord	er:						DISPOSITION				AGAINST D	EPARTMENT	/PROCESS		
Part NCR	No.						Rework Scrap Use-as-is Work Order Update	Scrap Machining Small Fab Use-as-is Thermoforming Finishing					Water Jet d. Eng. Coor. re/Packaging Supplier		Engineering Quality Other
Root					Desc	crip	tion of work order update	Τ	nitial	Act	ion	Sign &			
Cause		Date	Step	Qty		_	r Non-conformance	Ch	ief Eng	Descr	ription	Date	Verification	n	QC Inspector
oc/Data quip/Tooling perator laterial etup ther rocess upplier raining															
							F	AUL	T CATE	GORY					
Land	ing (Gear -			_		General				_	_			
		Bending Centre No Cracks Crushed/C Cuffs Heat Trea Inspection	Crimped, t n Strip in		o/s		Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short		Instruct Mainte Mislabe Misreac	on Incomplete ions Incomplete/U nance led	Jnclear	Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned V Power Loss/	ct issing Vrong		Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
	\vdash	Ripples in Torque W		vtrucio	, }	-	Drill Holes Drawing	\vdash	Offset	Calibration					
		rroraue W	aves iii t	:สนาน510	i 1	- 1	DIAWIIK	1	TOUT OF C	.สแมาสเเบท					

Out of Secuence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Finish

Folio

DART AEROSPACE LTD	Work Order:	945 84
Description: Washer	Part Number:	D3137-5
Inspection Dwg: D3137 Rev: F		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X	First Article	Proto	type
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Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.740	+/-0.010	.741	✓		1208	Veur
Ø0.257	+0.005/-0.000	.258	V			
Ø0.500 x 100°	+/-0.010	.508 X100	V			
Ø0.360	+/-0.010	. 345	V			
0.080	+/-0.010	.079	V			
0.200	+/-0.010	.100	1			
Ø0.650	+0.000/-0.010	,648	V		V	

11		<u> </u>		
Measured by:	Audited by:	Ö.	Prototype Approval:	N/A
Date: 13-01-22	Date:	(3:1,22	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.11.12	New Issue	KJ/JLM	
В	06.03.15	Ø0.650 dimension added; Ø0.660 dimension removed	KJ/JLM 1.A	
С	08.12.02	Dwg Rev updated	KJ/DD of	<i>Y</i>

